

## ABSTRACT OF THE DISCLOSURE

A highly compact measuring gas cell for a device for measuring the concentration of a paramagnetic gas on the basis of the change in the thermal conductivity of the paramagnetic gas, which is brought about by a change in the magnetic field. The measuring gas cell has a bottom plate (1) that carries a measuring element (1.4) for the detection of the thermal conductivity of the measured gas, electric leads, an electric measuring gas cell heater (1.2) and a temperature-dependent electric sensor element (1.3) for the detection of the temperature of the measuring gas cell. A channel plate (2) is cut out for the gas guide in the area of the measuring element (1.4) and around the measuring element (1.4). A cover plate (3), seals the measuring gas cell in the upward direction and has at least two holes for the inlet and outlet of the gas into and out of the gas guide of the channel plate (2).